## Supplementary Table S1. Glutathionylated Proteins Immunoprecipitated and Identified by Mass Spectrometry from Control Cells

Poly(A)-specific ribonuclease PARN	74 kD
Protein flightless-1 homolog	145 kD
RALBP1 associated Eps domain containing 2 Kinesin-like protein KIF3B	73 kD 85 kD
Isoform 1 of Protocadherin alpha 7 precursor	101 kD
Lymphocyte cytosolic protein 2	60 kD
Útrophin	394 kD
Heterogeneous nuclear ribonucleoprotein U isoform a	91 kD
TBC1 domain family member 4	147 kD
Dystonin  Isoform 1 of histone lycine NI methyltransferese, H2 lycine 26 and H4 lycine 20 specific	857 kD 297 kD
Isoform 1 of histone-lysine N-methyltransferase, H3 lysine-36 and H4 lysine-20 specific Collagen alpha-2(I) chain precursor	129 kD
Isoform 2 of 5'-3' exoribonuclease 1	193 kD
Insulin receptor substrate 1	132 kD
Protein COTE1	71 kD
Collagen alpha-1(IV) chain precursor	161 kD
Similar to retinoblastoma-associated protein 140 isoform 1	302 kD
Isoform 1 of collagen alpha-1(XXIII) chain	52 kD 63 kD
Hypothetical protein Mov34/MPN/PAD-1 family protein	54 kD
Rho guanine nucleotide exchange factor 18	131 kD
Zinc finger protein 609	151 kD
Eukaryotic translation initiation factor 4 gamma 2	102 kD
Dynein heavy chain domain 3	508 kD
Neutral amino acid transporter B	57 kD
Shroom-related protein  Isoform 1 of ATP dependent metallenrateurs VME1L1	217 kD 86 kD
Isoform 1 of ATP-dependent metalloprotease YME1L1 Ras homolog gene family, member U	28 kD
Similar to kelch-like 17	93 kD
Isoform A of trypsin-3 precursor	32 kD
Isoform 1 of serine/arginine repetitive matrix protein 2	300 kD
Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 2	97 kD
139 kD protein	139 kD
53 kD protein  Myatubularin ralated protein 9	53 kD 63 kD
Myotubularin-related protein 9 Isoform long of ADAM 11 precursor	83 kD
ARMC5 protein	81 kD
Conserved oligomeric Golgi complex component 1	109 kD
Glutamate-rich WD repeat-containing protein 1	49 kD
Isoform 2 of cell division protein kinase 9	53 kD
Isoform 1 of collagen alpha-5(IV) chain precursor	161 kD
Similar to ciliary rootlet coiled-coil, rootletin	83 kD 449 kD
Isoform 1 of vacuolar protein sorting-associated protein 13B Tyrosine-protein kinase receptor Tie-1 precursor	125 kD
Nucleolar protein Nop56	66 kD
Isoform 1 of centrosomal protein Cep290	291 kD
Inner nuclear membrane protein Man1	100 kD
Isoform 2 of HECT, UBA and WWE domain-containing protein 1	480 kD
Isoform 1 of methyl-CpG-binding domain protein 2	43 kD
Leiomodin 1	70 kD
Isoform 1 of phosphatase and actin regulator 2 Hydrocephalus inducing isoform a	70 kD 576 kD
Similar to SAMK3000	26 kD
5'-nucleotidase precursor	63 kD
Kalirin, RhoGEF kinase isoform 1	340 kD
Isoform A of Lamin-A/C	74 kD
Isoform 1 of G-protein coupled receptor 98 precursor	693 kD
Isoform 1 of Ras GTPase-activating protein SynGAP	147 kD
Isoform 2 of protein hairless Isoform 2 of mucin and cadherin-like protein precursor	122 kD 70 kD
Ciliary dynein heavy chain 7	461 kD
HRAS-like suppressor 2	17 kD
WD repeat protein 72	123 kD

## Supplementary Table S1. (Continued)

Similar to Temporarily Assigned Gene name family member	59 kD
Shadow of prion protein	15 kD
Tyrosine-protein kinase transmembrane receptor ROR2 precursor	105 kD
Actin-related protein 5	68 kD
HEAT repeat-containing protein 4	112 kD
Ribosome biogenesis regulatory protein homolog	41 kD
Isoform 4 of epidermal growth factor receptor kinase substrate 8-like protein 1	89 kD